

RCRA PART B PERMIT APPLICATION  
MARCUS HOOK REFINERY SURFACE IMPOUNDMENT  
SEPTEMBER 1991

## RCRA PART B PERMIT APPLICATION MARCUS HOOK REFINERY SURFACE IMPOUNDMENT

Prepared for:  
BP Oil Company  
Marcus Hook Refinery

Prepared by:  
Remediation Technologies, Inc.  
Chapel Hill, North Carolina

September 1991

## 1.0 INTRODUCTION

The BP Oil Company (BP Oil) Marcus Hook refinery is an approximately 350 acre facility located on the Delaware River in Marcus Hook, PA (Figure 1-1). The refinery has a process capacity of approximately 170,000 barrels per stream day. Products manufactured at the BP refinery include gasoline, kerosene, diesel fuel, residual fuel oils, bunker C fuel, aviation fuel, liquified petroleum gas (LPG) and sulfur; BP Oil also packages lube oils. Products manufactured at the facility are stored on-site before transport to customers via rail, barge, truck, and pipeline. The refinery operates 24 hours a day, and employs approximately 520 people.

On November 18, 1980, BP Oil Co. submitted to the U.S. Environmental Protection Agency (EPA), Region III, a Notification of Hazardous Waste Activity (EPA Form 8700-12) and a Part A application (Form 1, "General Information" and Form 3 "Hazardous Waste Permit Application") respectively for a hazardous waste storage facility. In the interim period, the hazardous waste storage facility was assigned the EPA Facility Identification Number PAD071612683 in accordance with Pa Code 25 § 264.11. On December 7, 1981, a revised Part A application was made in response to container storage rules Pa Code 25 §264 Subpart I, which became effective on July 13, 1981.

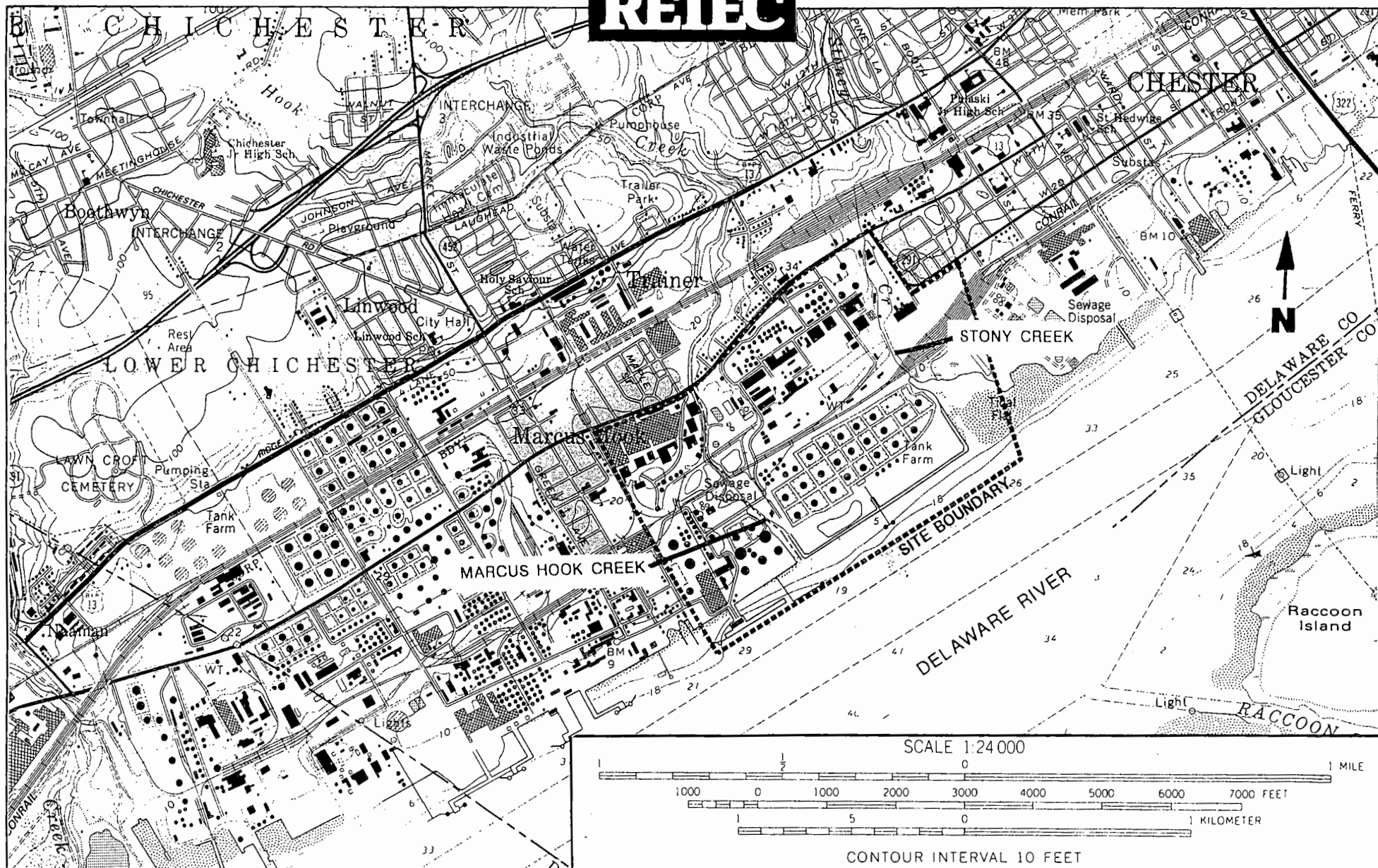
As a result of the promulgation of the Toxicity Characteristic (TC) rule on March 29, 1990, the surface impoundment at the BP Oil Marcus Hook refinery became a regulated subtitle C unit and, as such, became subject to all applicable regulations for surface impoundments managing RCRA hazardous wastes FR Vol. 55, No 61. On September 21, 1990, BP Oil submitted a Revised Part A application to the US EPA Region III, and the Pennsylvania Department of Environmental Resources (PADER) to include this newly regulated unit.

As a result of the Primary Sludge Rule [FR Vol. 55, No. 213, pp. 46395 - 46397; November 2, 1990], on May 2, 1991, the surface impoundment was also identified as a storage basin for newly established F038 hazardous waste. To remain in compliance with the regulations, on April 29, 1991, BP Oil submitted a Revised Part A application to US EPA Region III, and PADER.

BP Oil is seeking a permit for the temporary use of a surface impoundment for the storage of hazardous wastes at the Marcus Hook refinery. This document comprises the previously revised Part A application and the Part B application for the operation of the surface impoundment. The application also documents the applicable information required

BP Oil is submitting this Part B application for a permit for the surface impoundment in order to remain in compliance with the TC and Primary Sludge regulations. However, BP is planning closure for the unit, once necessary tankage is constructed to contain the waste streams that are presently directed to the impoundment. Soil and materials testing have been initiated at the eventual tankage location; the tanks are expected to be in place and operational by 1993.

**REFEC**



BP - MARCUS HOOK REFINERY SITE LOCATION MAP

FIG. 1-1

## 2.0 REGULATORY REFERENCE

---

The regulatory references in Table 2-1 represent the applicable regulatory citations for the completion of the Part B application; the regulations are to cross reference the appropriate sections of this permit application. This table is presented to facilitate the review process and to refer the reader to specific permit requirements or facility standards discussed in the application. In addition, various permit and facility standards are discussed and referenced throughout the permit application.

**TABLE 2-1**  
**REGULATORY CROSS REFERENCE LIST FOR**  
**THE PART B APPLICATION**  
**BP OIL - MARCUS HOOK, PA**

REQUIREMENT	REGULATORY CITATION	PART B APPLICATION SECTION
Part A Application	265.441(a)(270.12)	4.0
Environmental Assessment report Module 9	265.441(a), 265.451(4)	5.0
Compliance history Report Form - Form HW-C	264.441(a), 265.452(5)	6.0
Contractual Consent of Landowner	265.441(a)	7.0
Certification - Form HW-B	270.33(b), 265.444, 265.443(3), 265.443(1)	8.0
Application Fee	265.441(a), 265.447	9.0
Facility Location Information	265.451(1)(2)	10.0, 14.0
Soils, Geology, and Groundwater Report	265.451(3)	11.0
Operational Concept Report	265.451(5), 265.452(2)	12.0
Detailed Plans and engineering Report	265.452(1)	13.0
Waste Characteristics	264.13(a)	15.0
Waste Analysis Plan	264.13(a)	Appendix 14
Ignition/Reaction Precautions	264.17, 264.114(1)(2), 264.229, 264.230	16.0
Security	264.14(b)	17.0
Inspections	264.15(a-f), 264.114(3)	18.0
Training	264.16(a), (d), (e), (f), (b), (c), (g)	19.0
PPC Plan	Chapter 264 Subchapters C and D	20.0
Closure Plan	264.112(a), 264.111, 264.228(b)	21.0
Post Closure	264.118(a), 264.119(a)	21.0
Financial Assurance And Insurance	267.11(a), 267.19(a), 267.42(a), 267.44, 267.42(b)	22.0
Groundwater Monitoring Program	264.90(a)(b), 264.91(1-3), 264.97(a)(1-4) 264.97(c-k), 264.98(c-e)	23.0